- 1. An immunogenic composition comprising a combination of *Chlamydia trachomatis* antigens, said combination consisting of two, three, four or all five *Chlamydia trachomatis* antigens of a first antigen group, said first antigen group consisting of PepA, LcrE, ArtJ, DnaK and CT398.
- 2. The composition of claim 1, wherein said combination consists of PepA, LcrE, ArtJ, DnaK and CT398.
- 3. The composition of claim 1, wherein said combination includes LcrE.
- 4. The composition of claim 1, said composition further comprising one or more immunoregulatory agents.
- 5. The composition of claim 4, wherein said one or more immunoregulatory agents include an adjuvant.
- 6. The composition of claim 5, wherein said adjuvant is selected from the group consisting of a TH1 adjuvant and a TH2 adjuvant.
- 7. The composition of claim 5, wherein the adjuvant is selected from the group consisting of aluminum salts and oligonucleotides comprising CpG motifs.
- 8. An immunogenic composition comprising a combination of *Chlamydia trachomatis* antigens, said combination consisting of two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, or thirteen *Chlamydia trachomatis* antigens of a second antigen group, said second antigen group consisting PepA, LcrE, ArtJ, DnaK, CT398, OmpH-like, L7/L12, OmcA, AtoS, CT547, Enolase, HtrA and MurG.
- 9. The immunogenic composition of claim 8, wherein said combination includes one or more of the group consisting of PepA, LcrE, ArtJ, DnaK, OmpH-like and CT398.
- 10. The immunogenic composition of claim 8, wherein said combination includes LcrE.

WO 2005/002619 PCT/US2004/020491

11. The immunogenic composition of claim 8, wherein said combination includes OmpH-like protein.

- 12. The composition of claim 8, said composition further comprising one or more immunoregulatory agents.
- 13. The composition of claim 12, wherein said one or more immunoregulatory agents include an adjuvant.
- 14. The composition of claim 13, wherein said adjuvant is selected from the group consisting of a TH1 adjuvant and a TH2 adjuvant.
- 15. The composition of claim 13, wherein the adjuvant is selected from the group consisting of aluminum salts and oligonucleotides comprising CpG motifs.
- 16. A vaccine comprising the immunogenic composition of any one of the previous claims.
- 17. Use of the immunogenic composition according to any one of claim 1-15 or a vaccine according to claim 16 in the preparation of a medicament for the prevention or treatment of a Chlamydia trachomatis infection.
- 18. A method of neutralizing a *Chlamydia trachomatis* infection in a mammal comprising the step of administering to the mammal an effective amount of the composition of any one of claims 1 to 15 or the vaccine according to claim 16 or antibodies which recognize an immunogenic composition as defined in any one of claims 1 to 15.
- 19. A method of raising an immune response in a mammal against a *Chlamydia trachomatis* infection comprising administering to the mammal an effective amount of the composition of any one of claims 1 to 15 or the vaccine according to claim 16 or antibodies which recognizes an immunogenic composition as defined in any one of claims 1 to 15.
- 20. The method of claim 19, wherein said composition elicits an enhanced TH1 and TH2 immune response.

WO 2005/002619 PCT/US2004/020491

21. A method of raising Chlamydia trachomatis specific antibodies comprising administering to the mammal an effective amount of the composition of any one of claims 1 to 15 or the vaccine according to claim 16 or an antibody which recognizes a protein as defined in any one of claims 1 to 15.

- 22. An immunogenic composition comprising a combination of *Chlamydia trachomatis* antigens, said combination consisting of two, three, four or all five *Chlamydia trachomatis* antigens of a first antigen group, said first antigen group consisting of PepA, LcrE, ArtJ, DnaK and CT398, wherein said composition further comprising one or more immunoregulatory agents.
- 23. An immunogenic composition comprising an oligonucleotide containing a CpG motif, a mineral salt, and an antigen associated with a sexually transmissible disease.
- 24. The composition of claim 23, wherein said mineral salt is an aluminum salt.
- 25. The composition of claim 23, wherein said antigen is a Chlamydia trachomatis antigen.